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# **Comments of Southern California Gas Company and San Diego Gas & Electric Company on the:**

## **CEC Staff's Preliminary Natural Gas Assessment and Policy Issues Report**

### **Natural Gas Demand & Supply Issues**

**Presented by:**

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**Sacramento, California**

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## SoCalGas' Service Area

### Gas Demand Forecast Comparison with CEC Staff Report

- ❖ CEC Staff Report's forecasts of gas demand growth is generally 1.1% higher than SoCalGas' forecast for all Customer classes.

- Total Gas Demand MMth

	<u>2006</u>	<u>2016</u>	<u>Annual % Growth Rate</u>
SoCalGas	5,412	5,251	-0.3%
<u>CEC Staff</u>	<u>5,320</u>	<u>5,721</u>	<u>+0.8%</u>
Difference	-92	+470	+1.1%

- This difference in growth rates is mainly due to different energy efficiency-related gas and electricity savings assumptions related to the CPUC-mandated 10-year energy savings goals.

## SoCalGas' Service Area

### Gas Demand Forecast Comparison with CEC Staff Report

- ❖ CEC Staff Report's Residential market segment gas demand growth forecast is +0.1% higher than SoCalGas' forecast in the 2006 to 2016 timeframe.

- Residential (MMth)

	<u>2006</u>	<u>2016</u>	<u>Annual % Growth Rate</u>
SoCalGas	2,583	2,743	+0.6%
<u>CEC Staff</u>	<u>2,520</u>	<u>2,714</u>	<u>+0.7%</u>
Difference	-63	-29	+0.1%

- The difference is related mainly to differing EE assumptions.

## SoCalGas' Service Area

### Gas Demand Forecast Comparison with CEC Staff Report

- ❖ CEC Staff Report's forecast of gas demand in the C&I market segment is 1.9% higher than SoCalGas' forecast.

- Commercial and Industrial (MMth)

	<u>2006</u>	<u>2016</u>	<u>Annual % Growth Rate</u>
SoCalGas	2,829	2,508	- 1.1%
CEC Staff	2,799	3,007	+0.7%
Difference	-30	+499	+1.9%

- The difference in growth rates is mainly due to SoCalGas' assumption that the 10-year CPUC-mandated gas savings goals will be achieved while the CEC Staff assumes gas savings only through the 2005-2008 Energy Efficiency Program cycle.

## SoCalGas' Service Area

### Gas Demand Forecast Comparison with CEC Staff Report

- ❖ CEC Staff Report's forecast of gas demand growth is also higher than SoCalGas' forecast for the Electric Generation market segment.

- Electric Generation (MMcfd)

	<u>2006</u>	<u>2016</u>	<u>Annual % Growth Rate</u>
SoCalGas	800	775	-0.3%
CEC Staff	702	778	+1.1%
Difference	-98	+3	+1.4%

- Overall forecasts may be due to different electric load forecasts, accounting for cogeneration demand and assumptions regarding plants served off the SoCalGas system.



## SDG&E's Service Area

### Gas Demand Forecast Comparison with CEC Staff Report

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- ❖ CEC Staff Report's forecasts of gas demand is 0.5% higher than SDG&E's forecast for all customer classes.

- Total Gas Demand MMth

	<u>2006</u>	<u>2016</u>	<u>Annual % Growth Rate</u>
SDG&E	542	574	+0.6%
<u>CEC Staff</u>	<u>556</u>	<u>619</u>	<u>+1.1%</u>
Difference	+14	+45	+0.5%

- The difference is related to different energy efficiency program assumptions and customer growth forecasts.



## SDG&E's Service Area

### Gas Demand Forecast Comparison with CEC Staff Report

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- ❖ CEC Staff Report's Residential market segment gas demand forecast is generally the same as SDG&E's forecast for the entire 2006 to 2016 timeframe.

- Residential (MMth)

	<u>2006</u>	<u>2016</u>	<u>Annual % Growth Rate</u>
SDG&E	328	363	+1.0%
<u>CEC Staff</u>	<u>363</u>	<u>403</u>	<u>+1.0%</u>
Difference	+35	+40	+0.0%

- The growth rates are the same but the CEC is forecasting a higher *level* of demand in 2006 and 2016.



## SDG&E's Service Area

### Gas Demand Forecast Comparison with CEC Staff Report

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- ❖ CEC Staff Report's Commercial & Industrial market segment gas demand forecast is 1.3% higher than SDG&E's forecast in the 2006 to 2016 timeframe.

- Commercial & Industrial (MMth)

	<u>2006</u>	<u>2016</u>	<u>Annual % Growth Rate</u>
SDG&E	214	211	-0.1%
<u>CEC Staff</u>	<u>192</u>	<u>216</u>	<u>+1.2%</u>
Difference	-22	+5	+1.3%

- The difference in total demand by 2016 is mainly due to differing EE assumptions.





## ***SDG&E's Service Area***

### ***Gas Demand Forecast Comparison with CEC Staff Report***

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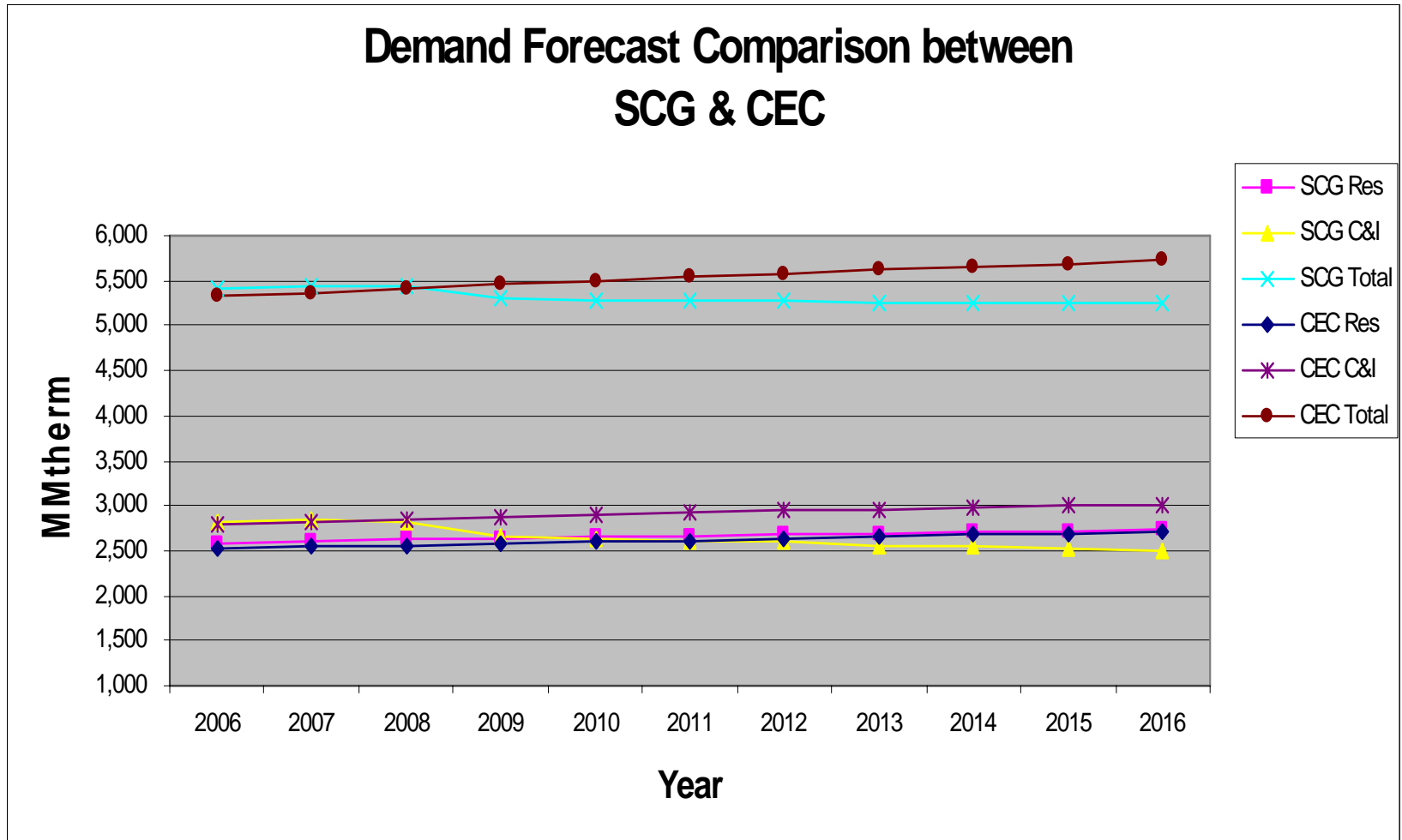
- ❖ CEC Staff Report's forecast of gas demand is also higher than SDG&E's forecast for the Electric Generation market segment.

- Electric Generation (MMcfd)

	<u>2006</u>	<u>2016</u>	<u>Annual % Change</u>
SDG&E	177	207	+1.7%
CEC Staff	147	215	+4.6%
Difference	-30	+8	+2.9%

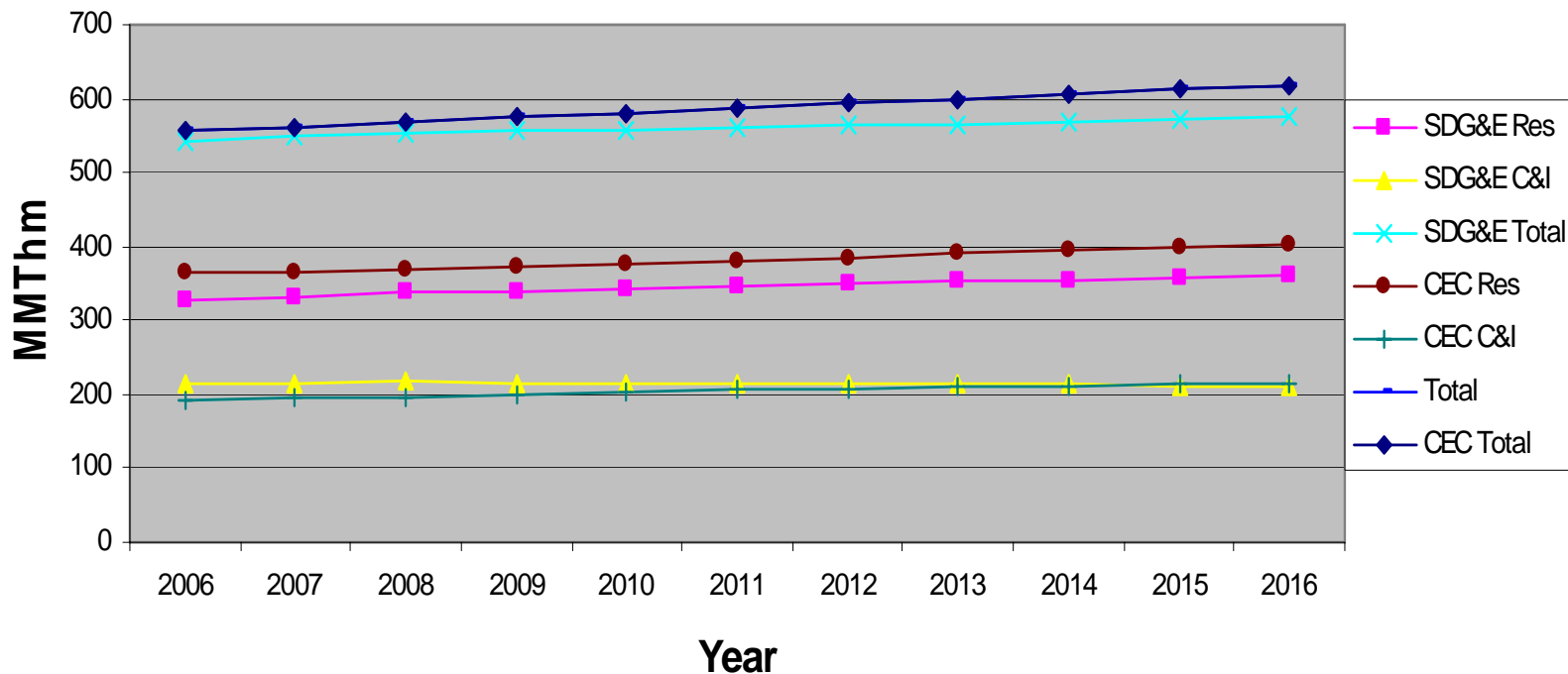
- The difference in growth rates is mainly due to different starting points. May also be differences in electric load forecasts.

# Natural Gas Demand Forecasts SoCalGas & CEC Staff Report



# Natural Gas Demand Forecasts SDG&E & CEC Staff Report

## Demand Forecast Comparison between SDG&E & CEC



# Gas Supply Issues

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- ❖ Domestic natural gas resources are available but most of these resources are located in environmentally sensitive areas (offshore, national parks and wildlife reserves) or in remote locations, such as Alaska and the Canadian Arctic.
- ❖ These resources can be developed meeting environmental standards but cannot be counted on to provide significant supplies in the near term.
- ❖ Unconventional supplies, such as: shale gas, tight sands gas, coal-bed methane, coal gasification, bio-gas and LNG are currently cost-effective and will continue to increase in the near future.
- ❖ The state can review its gas policies to assure that developers are not impeded in obtaining exploration and production permits.

## *Gas Supply Issues - LNG*

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- ❖ LNG supplies will become an increasingly larger portion of world energy demand and LNG is looked upon as a clean energy source throughout the world.
- ❖ Domestic opposition to locating LNG receiving terminals on the west and east coasts of the U.S. is intense due to terrorist concerns and the remote likelihood of tanker accidents.
- ❖ LNG will be a cost-effective, environmentally acceptable source of gas supply in the future. California will reap the supply security and cost reduction benefits of new LNG receiving terminals located on the west coast of North America, the Gulf of Mexico and east coast.
- ❖ To assure adequate gas supplies in the future and to moderate gas prices, California should promote the development of new supplies, pipeline facilities and LNG receiving terminals in acceptable locations to enhance supply diversity and reduce gas costs to consumers.



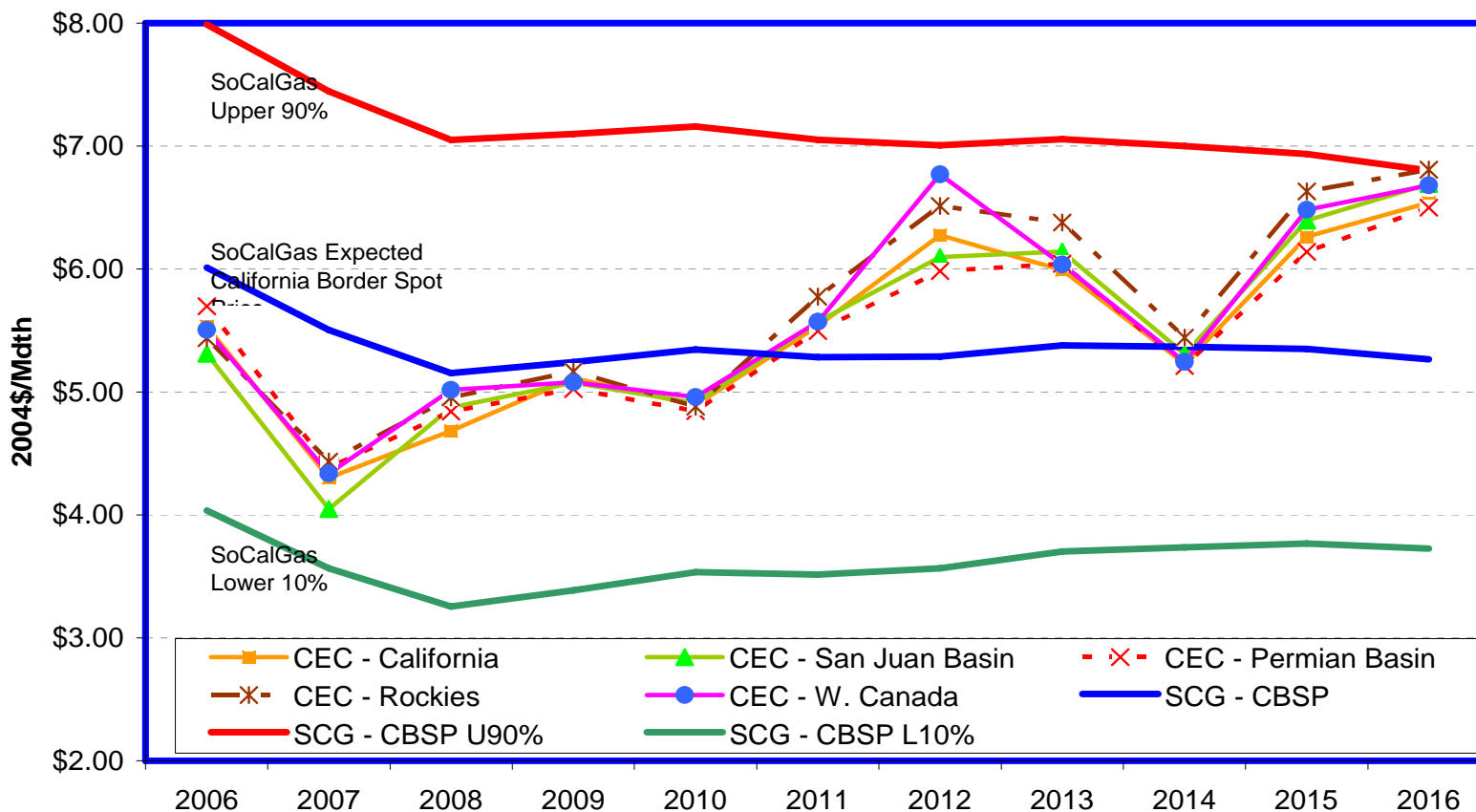
## *Gas Price Forecasts*

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- ❖ SoCalGas/SDG&E expect prices to remain high until sufficient LNG arrives in North America in 2008 and beyond to moderate prices.
- ❖ SoCalGas/SDG&E expect a long-term gas price in the low to mid \$5/MMbtu (constant 2004 dollars) due to the arrival of LNG and an expected moderation of oil prices in the long-run.
- ❖ A robust global LNG market, and increased supply from Arctic gas also are expected to moderate prices in the medium to long term.
- ❖ Growing demand, especially in the electric generation market, will cause the natural gas market to tighten and lead to price volatility.
- ❖ In the long-run, emerging technologies, such as clean burning coal for electric generation, will compete with natural gas and help moderate gas prices somewhat.

# Gas Price Forecasts

Comparison Between CEC and SCG Projected Natural Gas Basin Prices  
Constant 2004 Dollars/Mdth



Source: California Energy Commission, Natural Gas and Special Projects Office  
Southern California Gas, Phase II Natural Gas OIR

## *Gas Price/Market Issues*

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- ❖ High natural gas prices will significantly impact gas-intensive industrial sectors in California, such as: food and beverage processors; paper producers; chemicals; stone, clay and glass manufacturers; and metals producers.
- ❖ Higher natural gas prices reduce Californian's disposable income for other goods and services and a just a thirty-cent per therm difference between "higher" and previously "lower" gas prices (i.e., 70 cents versus 40 cents per therm); would cost California consumers **\$1.5 billion per year** (10 million customers x 500 therms/year x \$0.30/therm).